This listing of claims replaces all prior versions, and listings, of claims in this application.

Listing of Claims:

1. (Canceled)

2. (Currently Amended) The ~~Method~~ method according to Claim ~~1~~ 17, ~~characterized in that~~ wherein the gripping mechanism ~~(12)~~ is arranged on the robot unit ~~(10)~~ in such a way that a further horizontal motion, which overlays transfer along the horizontal beam ~~(20)~~, can be achieved.

3. (Currently Amended) The ~~Method~~ method according to Claim ~~1~~ 17, ~~characterized in that~~ wherein the gripping mechanism ~~(12)~~ is arranged with at least two grip units ~~(12A, 12B)~~, ~~the one~~ a first grip unit ~~(12A)~~ collecting the work object ~~(2)~~ in an end situation ~~(E2)~~ and ~~the other~~ a second grip unit ~~(12B)~~ depositing the work object ~~(2)~~ in another end situation ~~(F2)~~, and ~~in that~~ wherein an intermediate storage ~~(16)~~ for change of place of the work object ~~(2)~~ is effected before it is transferred from the one end situation ~~(E2)~~ to the other end situation ~~(F2)~~.

4. (Withdrawn) Method according to Claim 3, characterized in that the said device for intermediate storage (16) is arranged movably in at least the horizontal direction in the same direction in which the main horizontal transfer of the robot unit is effected.

5. (Currently Amended) The ~~Method~~ method according to Claim ~~1~~ 17, ~~characterized in that~~ wherein the ~~transfer of the gripping mechanism is~~ pre-programmed path is ~~in by means of a so called "teach in" process, wherein a work cycle is~~ programmed ~~in~~ by an operator's ~~by~~ actually transferring ~~of~~ the gripping mechanism ~~(12)~~ through ~~the~~ a work cycle, and wherein successive

registration of desired values is programmed in with respect to the rotor units forming part of the said motors ~~(26,27)~~, so that the control computer ~~(51)~~, through communication with a registration unit ~~(52)~~, can subsequently ensure automatic operation.

6. (Currently Amended) The ~~Robot~~ robot unit ~~(10)~~ for realizing the process according to Claim ~~1~~ 17 comprising:

a first beam unit ~~(20)~~ extending between two end points ~~(E2, F2)~~ and ~~a~~ the first and ~~a~~ the second workstation ~~(3, 4)~~, wherein the first beam unit is the essentially horizontally extending beam;

a slide ~~(11)~~ which is arranged movably along the ~~said~~ first beam unit ~~(20),~~;

a second beam unit ~~(22)~~ which extends essentially perpendicular to the first ~~said~~ beam unit ~~(20)~~ and which is arranged movably on the ~~said~~ slide ~~(11)~~;

the ~~a~~ gripping mechanism ~~(12)~~ arranged on ~~the~~ one end ~~(22A)~~ of the ~~said~~ second beam unit ~~(22),~~; and

the at least two drive motors ~~(26A, 27B)~~, which are connected to ~~a~~ the control unit ~~(50)~~, a number of deflection rollers ~~(28, 30)~~, and ~~a~~ the belt member ~~(24)~~,

wherein ~~characterized in that~~ the ~~said~~ belt member ~~(24)~~ is in the form of a single continuous drive belt ~~(24)~~ which runs around the ~~two~~ drive wheels ~~(26A, 27B)~~ of the ~~said~~ drive motors and the ~~said~~ deflection rollers and is fastened to the one end ~~(22-A)~~ of the ~~said~~ second beam unit ~~(22)~~, and ~~in that~~

wherein the ~~same~~ gripping mechanism ~~(12)~~ reaches end points ~~(E2, F2)~~ placed beyond the two end points ~~(E1, F1)~~ of the ~~said~~ horizontal beam ~~(22)~~, and ~~in that~~

wherein the ~~said~~ control unit ~~(50)~~ is connected to an operator panel ~~(60) by means of~~ through which the control computer ~~(51)~~ in the control unit ~~(50)~~ can continuously be re-programmed ~~by a so-called "teach-in" process~~ by manually controlling the gripping mechanism to move into chosen situations.

7. (Currently Amended) The ~~Robot~~ robot unit according to Claim 6, ~~characterized in that~~ wherein the gripping mechanism ~~(12)~~ comprises an elongated member ~~(12D)~~.

8. (Currently Amended) The ~~Robot~~ robot unit according to Claim 7, ~~characterized in that~~ wherein the ~~said~~ elongated member ~~(12D)~~, at its one end, is arranged with a first gripping mechanism element ~~(12A)~~ and, at its other end, is arranged with a second gripping mechanism element ~~(12B)~~, the ~~said~~ elongated member ~~(12D)~~ extending in the same longitudinal direction as the said first beam unit ~~(20)~~, such that the elongated member can simultaneously pick a first object at its one end and a second object at its other end.

9. (Currently Amended) The ~~Robot~~ robot unit according to Claim 6, ~~characterized in that~~ wherein, between the ~~said~~ first and second workstation ~~(3, 4)~~, an intermediate table ~~(16)~~ is arranged for intermediate storage of ~~a~~ the work object ~~(2)~~.

10. (Withdrawn) Robot unit according to Claim 9, characterized in that the said intermediate table is arranged movably in relation to the said workstation (3, 4).

11. (Withdrawn) Robot unit according to Claim 7, characterized in that the said gripping mechanism (12C) is arranged movably in relation to the said elongated member (12D).

12. (Withdrawn) Robot unit according to Claim 11, characterized in that the said movable gripping mechanism unit (12C) is moved by means of retardation forces along the said beam unit (12D).

13. (Withdrawn) Robot unit according to Claim 11, characterized in that the said displaceable gripping mechanism unit (12C) is forcibly displaced along the said beam unit (12C) by means of a drive belt (29) driven by a drive wheel (31) which is physically connected to any of the said deflection rollers (28, 30).

14. (Withdrawn) Robot unit according to Claim 10, characterized in that an upward-facing and downward-facing robot unit (10A) is mounted beneath the first robot unit (10), which upward-facing and downward-facing robot unit (10A) constitutes an intermediate storage table (16C) for the said first robot unit.

15. (Withdrawn) Robot unit according to claim 1, characterized by a further drive belt (36), which is drivably connected to a transmission (39) on the lower end (22A) of the vertical beam (22), in order to be able to perform further motion with the gripping mechanism (12).

16. (Withdrawn) Robot unit according to Claim, characterized in that the said belt (36) is driven by a drive wheel (37) connected to one of the said deflection rollers (30A).

17. (New) A method for rapidly transferring a work object in both horizontal and vertical directions, the method comprising:

providing a robot unit having a gripping mechanism;

providing a first workstation and a second workstation between which to transfer the work object, the work object weighing between one kilo and forty kilos, and the transfer in the horizontal direction being at least one meter but less than ten meters and at least partially being effected along an essentially horizontally extending beam;

arranging the gripping mechanism such that, at least in a first end situation along the beam, the gripping mechanism can collect the work object in a first position situated beyond the first end situation along the beam,

controlling the robot unit with a control unit;

driving the robot unit with a belt member and at least two motors having rotor units connected to drive wheels for the belt member;

immovably arranging the at least two motors in relation to the first and second workstations;

effecting transfer of the work object without displacement of either of the at least two motors;

executing the entire transfer of the work object along the beam;

providing the belt member as a single continuous drive belt, which, at the same time, is connected to and driven by the drive wheels; and

guiding the transfer of the work object along a pre-programmed path using a control computer in the control unit, through continuous control and registration of the situation of each of the rotor units of the motors.